RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/855,294 C
Source: IFW16
Date Processed by STIC: 07/27/2005

ENTERED

IFW16

RAW SEQUENCE LISTING DATE: 07/27/2005
PATENT APPLICATION: **US/09/855,294C** TIME: 12:09:25

Input Set : **D:\3589.1007-000 seq list.txt**
Output Set: **N:\CRF4\07272005\I855294C.raw**

(pg-6)

```
 4 <110> APPLICANT: Croce, Carlo
 5       Brenner, Charles
 6       Pekarsky, Yuri
 8 <120> TITLE OF INVENTION: CRYSTAL STRUCTURE OF WORM Nit Fhit
 9       REVEALS THAT A Nit TETRAMER BINDS TWO Fhit DIMERS
12 <130> FILE REFERENCE: 3589.1007-000
14 <140> CURRENT APPLICATION NUMBER: 09/855,294C
15 <141> CURRENT FILING DATE: 2001-05-15
17 <150> PRIOR APPLICATION NUMBER: 60/204,713
18 <151> PRIOR FILING DATE: 2000-05-16
20 <160> NUMBER OF SEQ ID NOS: 15
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 276
26 <212> TYPE: PRT
27 <213> ORGANISM: Homo sapiens
29 <400> SEQUENCE: 1
30 Met Thr Ser Phe Arg Leu Ala Leu Ile Gln Leu Gln Ile Ser Ser Ile
31  1               5                  10                  15
32 Lys Ser Asp Asn Val Thr Arg Ala Cys Ser Phe Ile Arg Glu Ala Ala
33             20                  25                  30
34 Thr Gln Gly Ala Lys Ile Val Ser Leu Pro Glu Cys Phe Asn Ser Pro
35         35                  40                  45
36 Tyr Gly Ala Lys Tyr Phe Pro Glu Tyr Ala Glu Lys Ile Pro Gly Glu
37     50                  55                  60
38 Ser Thr Gln Lys Leu Ser Glu Val Ala Lys Glu Cys Ser Ile Tyr Leu
39 65                  70                  75                  80
40 Ile Gly Gly Ser Ile Pro Glu Glu Asp Ala Gly Lys Leu Tyr Asn Thr
41                 85                  90                  95
42 Cys Ala Val Phe Gly Pro Asp Gly Thr Leu Leu Ala Lys Tyr Arg Lys
43             100                 105                 110
44 Ile His Leu Phe Asp Ile Asp Val Pro Gly Lys Ile Thr Phe Gln Glu
45         115                 120                 125
46 Ser Lys Thr Leu Ser Pro Gly Asp Ser Phe Ser Thr Phe Asp Thr Pro
47     130                 135                 140
48 Tyr Cys Arg Val Gly Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu
49 145                 150                 155                 160
50 Leu Ala Gln Ile Tyr Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro
51                 165                 170                 175
52 Gly Ala Phe Asn Leu Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln
53             180                 185                 190
54 Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro
55         195                 200                 205
```

RAW SEQUENCE LISTING DATE: 07/27/2005
PATENT APPLICATION: **US/09/855,294C** TIME: 12:09:25

Input Set : **D:\3589.1007-000 seq list.txt**
Output Set: **N:\CRF4\07272005\I855294C.raw**

```
56 Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val
57     210                 215                 220
58 Val Asn Pro Trp Gly Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala
59 225                 230                 235                 240
60 Ile Val Tyr Ser Asp Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln
61                 245                 250                 255
62 Gln Ile Pro Val Phe Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu
63             260                 265                 270
64 Met Lys Lys Pro
65         275
68 <210> SEQ ID NO: 2
69 <211> LENGTH: 276
70 <212> TYPE: PRT
71 <213> ORGANISM: Mus musculus
73 <400> SEQUENCE: 2
74 Met Ser Thr Phe Arg Leu Ala Leu Ile Gln Leu Gln Val Ser Ser Ile
75  1               5                  10                  15
76 Lys Ser Asp Asn Leu Thr Arg Ala Cys Ser Leu Val Arg Glu Ala Ala
77             20                  25                  30
78 Lys Gln Gly Ala Asn Ile Val Ser Leu Pro Glu Cys Phe Asn Ser Pro
79         35                  40                  45
80 Tyr Gly Thr Thr Tyr Phe Pro Asp Tyr Ala Glu Lys Ile Pro Gly Glu
81     50                  55                  60
82 Ser Thr Gln Lys Leu Ser Glu Val Ala Lys Glu Ser Ser Ile Tyr Leu
83 65                  70                  75                  80
84 Ile Gly Gly Ser Ile Pro Glu Glu Asp Ala Gly Lys Leu Tyr Asn Thr
85                 85                  90                  95
86 Cys Ser Val Phe Gly Pro Asp Gly Ser Leu Leu Val Lys His Arg Lys
87             100                 105                 110
88 Ile His Leu Phe Asp Ile Asp Val Pro Gly Lys Ile Thr Phe Gln Glu
89         115                 120                 125
90 Ser Lys Thr Leu Ser Pro Gly Asp Ser Phe Ser Thr Phe Asp Thr Pro
91     130                 135                 140
92 Tyr Cys Lys Val Gly Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu
93 145                 150                 155                 160
94 Leu Ala Gln Ile Tyr Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro
95                 165                 170                 175
96 Gly Ala Phe Asn Leu Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln
97             180                 185                 190
98 Arg Ala Arg Ala Val Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro
99         195                 200                 205
100 Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val
101     210                 215                 220
102 Val Asp Pro Trp Gly Gln Val Leu Thr Lys Ala Gly Thr Glu Glu Thr
103 225                 230                 235                 240
104 Ile Leu Tyr Ser Asp Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln
105                 245                 250                 255
106 Gln Ile Pro Ile Leu Lys Gln Lys Arg Ala Asp Leu Tyr Thr Val Glu
107             260                 265                 270
```

RAW SEQUENCE LISTING DATE: 07/27/2005
PATENT APPLICATION: **US/09/855,294C** TIME: 12:09:25

Input Set : **D:\3589.1007-000 seq list.txt**
Output Set: **N:\CRF4\07272005\I855294C.raw**

```
108 Ser Lys Lys Pro
109         275
112 <210> SEQ ID NO: 3
113 <211> LENGTH: 288
114 <212> TYPE: PRT
115 <213> ORGANISM: Xenopus laevis
117 <400> SEQUENCE: 3
118 Met Ala Gly Ala His Lys Pro Leu Ile Ala Val Cys Gln Met Thr Ser
119  1               5                  10                  15
120 Thr Ser Asp Lys Glu Lys Asn Phe Ala Thr Cys Ser Arg Leu Ile Arg
121             20                  25                  30
122 Glu Ala Ala Gly Arg Arg Ala Cys Met Val Phe Leu Pro Glu Ala Phe
123         35                  40                  45
124 Asp Tyr Ile Gly Gly Ser Ile Glu Glu Thr Leu Ser Leu Ala Glu Ser
125     50                  55                  60
126 Leu His Gly Asp Thr Ile Gln Arg Tyr Thr Gln Leu Ala Arg Glu Cys
127 65                  70                  75                  80
128 Gly Leu Trp Leu Ser Leu Gly Gly Phe His Glu Lys Gly Pro Asn Trp
129                 85                  90                  95
130 Asp Thr Asp Gln Arg Ile Ser Asn Ser His Val Val Val Asp Asn Thr
131             100                 105                 110
132 Gly His Ile Val Ser Val Tyr Arg Lys Ala His Leu Phe Asp Val Asp
133         115                 120                 125
134 Leu Gln Asn Gly Val Ser Leu Arg Glu Ser Ser Ser Thr Leu Pro Gly
135     130                 135                 140
136 Ala Glu Leu Ile Arg Pro Ile Thr Ser Pro Ala Gly Lys Ile Gly Leu
137 145                 150                 155                 160
138 Gly Val Cys Tyr Asp Leu Arg Phe Pro Glu Phe Ser Leu Ala Leu Ala
139                 165                 170                 175
140 Gln Gln Gly Ala Glu Leu Leu Thr Tyr Pro Ser Ala Phe Thr Leu Thr
141             180                 185                 190
142 Thr Gly Leu Ala His Trp Glu Val Leu Leu Arg Ala Arg Ala Ile Glu
143         195                 200                 205
144 Thr Gln Cys Tyr Val Val Ala Ala Ala Gln Thr Asp Arg His Asn Glu
145     210                 215                 220
146 Lys Arg Thr Ser Tyr Gly His Ala Met Val Val Asp Pro Trp Gly Leu
147 225                 230                 235                 240
148 Val Ile Gly Gln Cys Gln Glu Gly Thr Gly Ile Cys Tyr Ala Glu Ile
149                 245                 250                 255
150 Asp Ile Pro Tyr Met Glu Arg Val Arg Arg Asp Met Pro Val Trp Arg
151             260                 265                 270
152 His Arg Arg Thr Asp Leu Tyr Gly Lys Ile Ser Phe Asn Lys Pro Asp
153         275                 280                 285
156 <210> SEQ ID NO: 4
157 <211> LENGTH: 307
158 <212> TYPE: PRT
159 <213> ORGANISM: S. cerevisiae
161 <400> SEQUENCE: 4
162 Met Thr Ser Lys Leu Lys Arg Val Ala Val Ala Gln Leu Cys Ser Ser
```

RAW SEQUENCE LISTING DATE: 07/27/2005
PATENT APPLICATION: **US/09/855,294C** TIME: 12:09:25

Input Set : **D:\3589.1007-000 seq list.txt**
Output Set: **N:\CRF4\07272005\I855294C.raw**

```
163  1               5                  10                  15
164 Ala Asp Leu Thr Lys Asn Leu Lys Val Val Lys Glu Leu Ile Ser Glu
165             20                  25                  30
166 Ala Ile Gln Lys Lys Ala Asp Val Val Phe Leu Pro Glu Ala Ser Asp
167         35                  40                  45
168 Tyr Leu Ser Gln Asn Pro Leu His Ser Arg Tyr Leu Ala Gln Lys Ser
169     50                  55                  60
170 Pro Lys Phe Ile Arg Gln Leu Gln Ser Ser Ile Thr Asp Leu Val Arg
171 65                  70                  75                  80
172 Asp Asn Ser Arg Asn Ile Asp Val Ser Ile Gly Val His Leu Pro Pro
173                 85                  90                  95
174 Ser Glu Gln Asp Leu Leu Glu Gly Asn Asp Arg Val Arg Asn Val Leu
175             100                 105                 110
176 Leu Tyr Ile Asp His Glu Gly Lys Ile Leu Gln Glu Tyr Gln Lys Leu
177         115                 120                 125
178 His Leu Phe Asp Val Asp Val Pro Asn Gly Pro Ile Leu Lys Glu Ser
179     130                 135                 140
180 Lys Ser Val Gln Pro Gly Lys Ala Ile Pro Asp Ile Ile Glu Ser Pro
181 145                 150                 155                 160
182 Leu Gly Lys Leu Gly Ser Ala Ile Cys Tyr Asp Ile Arg Phe Pro Glu
183                 165                 170                 175
184 Phe Ser Leu Lys Leu Arg Ser Met Gly Ala Glu Ile Leu Cys Phe Pro
185             180                 185                 190
186 Ser Ala Phe Thr Ile Lys Thr Gly Glu Ala His Trp Glu Leu Leu Gly
187         195                 200                 205
188 Arg Ala Arg Ala Val Asp Thr Gln Cys Tyr Val Leu Met Pro Gly Gln
189     210                 215                 220
190 Val Gly Met His Asp Leu Ser Asp Pro Glu Trp Glu Lys Gln Ser His
191 225                 230                 235                 240
192 Met Ser Ala Leu Glu Lys Ser Ser Arg Arg Glu Ser Trp Gly His Ser
193                 245                 250                 255
194 Met Val Ile Asp Pro Trp Gly Lys Ile Ile Ala His Ala Asp Pro Ser
195             260                 265                 270
196 Thr Val Gly Pro Gln Leu Ile Leu Ala Asp Leu Asp Arg Glu Leu Leu
197         275                 280                 285
198 Gln Glu Ile Arg Asn Lys Met Pro Leu Trp Asn Gln Arg Arg Asp Asp
199     290                 295                 300
200 Leu Phe His
201 305
204 <210> SEQ ID NO: 5
205 <211> LENGTH: 291
206 <212> TYPE: PRT
207 <213> ORGANISM: S. cerevisiae
209 <400> SEQUENCE: 5
210 Met Ser Ala Ser Lys Ile Leu Ser Gln Lys Ile Lys Val Ala Leu Val
211  1               5                  10                  15
212 Gln Leu Ser Gly Ser Ser Pro Asp Lys Met Ala Asn Leu Gln Arg Ala
213             20                  25                  30
214 Ala Thr Phe Ile Glu Arg Ala Met Lys Glu Gln Pro Asp Thr Lys Leu
```

RAW SEQUENCE LISTING DATE: 07/27/2005
PATENT APPLICATION: US/09/855,294C TIME: 12:09:25

Input Set : D:\3589.1007-000 seq list.txt
Output Set: N:\CRF4\07272005\I855294C.raw

```
215         35                  40                  45
216 Val Val Leu Pro Glu Cys Phe Asn Ser Pro Tyr Ser Thr Asp Gln Phe
217     50                  55                  60
218 Arg Lys Tyr Ser Glu Val Ile Asn Pro Lys Glu Pro Ser Thr Ser Val
219 65                  70                  75                  80
220 Gln Phe Leu Ser Asn Leu Ala Asn Lys Phe Lys Ile Ile Leu Val Gly
221                 85                  90                  95
222 Gly Thr Ile Pro Glu Leu Asp Pro Lys Thr Asp Lys Ile Tyr Asn Thr
223             100                 105                 110
224 Ser Ile Ile Phe Asn Glu Asp Gly Lys Leu Ile Asp Lys His Arg Lys
225         115                 120                 125
226 Val His Leu Phe Asp Val Asp Ile Pro Asn Gly Ile Ser Phe His Glu
227     130                 135                 140
228 Ser Glu Thr Leu Ser Pro Gly Glu Lys Ser Thr Thr Ile Asp Thr Lys
229 145                 150                 155                 160
230 Tyr Gly Lys Phe Gly Val Gly Ile Cys Tyr Asp Met Arg Phe Pro Glu
231                 165                 170                 175
232 Leu Ala Met Leu Ser Ala Arg Lys Gly Ala Phe Ala Met Ile Tyr Pro
233             180                 185                 190
234 Ser Ala Phe Asn Thr Val Thr Gly Pro Leu His Trp His Leu Leu Ala
235         195                 200                 205
236 Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val Met Leu Cys Ser Pro
237     210                 215                 220
238 Ala Arg Asn Leu Gln Ser Ser Tyr His Ala Tyr Gly His Ser Ile Val
239 225                 230                 235                 240
240 Val Asp Pro Arg Gly Lys Ile Val Ala Glu Ala Gly Glu Gly Glu Glu
241                 245                 250                 255
242 Ile Ile Tyr Ala Glu Leu Asp Pro Glu Val Ile Glu Ser Phe Arg Gln
243             260                 265                 270
244 Ala Val Pro Leu Thr Lys Gln Arg Arg Phe Asp Val Tyr Ser Asp Val
245         275                 280                 285
246 Asn Ala His
247     290
250 <210> SEQ ID NO: 6
251 <211> LENGTH: 276
252 <212> TYPE: PRT
253 <213> ORGANISM: S. pombe
255 <400> SEQUENCE: 6
256 Met Thr Leu Ala Ala Val Ala Gln Leu Asn Ser Ser Gly Ser Ile Leu
257  1               5                  10                  15
258 Lys Asn Leu Ala Ile Cys Lys Glu Leu Ile Ser Gln Ala Ala Ala Lys
259             20                  25                  30
260 Gly Ala Lys Cys Ile Phe Phe Pro Glu Ala Ser Asp Phe Ile Ala His
261         35                  40                  45
262 Asn Ser Asp Glu Ala Ile Glu Leu Thr Asn His Pro Asp Cys Ser Lys
263     50                  55                  60
264 Phe Ile Arg Asp Val Arg Glu Ser Ala Thr Lys His Ser Ile Phe Val
265 65                  70                  75                  80
266 Asn Ile Cys Val His Glu Pro Ser Lys Val Lys Asn Lys Leu Leu Asn
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/27/2005
PATENT APPLICATION: **US/09/855,294C** TIME: 12:09:26

Input Set : **D:\3589.1007-000 seq list.txt**
Output Set: **N:\CRF4\07272005\I855294C.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; N Pos. 1270
Seq#:10; N Pos. 1083

VERIFICATION SUMMARY DATE: 07/27/2005
PATENT APPLICATION: **US/09/855,294C** TIME: 12:09:26

Input Set : **D:\3589.1007-000 seq list.txt**
Output Set: **N:\CRF4\07272005\I855294C.raw**

L:376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:1260
L:437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:1080